AMENDMENTS TO THE DRAWINGS:

Figure 1 has been amended to include an enlarged portion that shows the upper nozzle region.

REMARKS

The application has been amended and is believed to be in condition for allowance.

Figure 1 has been amended to include an enlarged portion that shows the upper nozzle region.

The claims have been amended responsive to the indefiniteness rejection.

Claim 6 has been amended to remove "such as carbide". New claim 12 includes this recitation.

As to claims 8, 10, and 11 reciting "piece", attention is directed to the last three paragraphs of specification page 3 which disclose that "The seat 2F is provided by means of a piece connected in the opening of the cavity 2B, this opening of the cavity 2B constituting the outlet orifice of the jet. The seat 2F has the shape of a semispherical cup open at its base to delimit a passage for the outlet of the fluid flow, the diameter of this outlet passage for fluid flow of the seat corresponding to the smallest internal diameter d2 mentioned above. In the illustrated example, the seat 2F has the shape of a semispherical cup, the bottom of the semispherical cup opening into a second cavity of generally semispherical shape, the bases of the half spheres being tangent so as to delimit a passage for fluid in the general shape of an hourglass. The spray nozzle 2E and the seat 2F are made of a material such as carbide, of higher hardness

than that of the materials constituting the body 2A and the injector 2C of the nozzle, so as to reduce wear of the assembly."

Claims 8, 10, and 11 have been amended to recite that "the seat (2F) is a piece connected to the opening of the cavity (2B)".

Withdrawal of the indefiniteness rejection is solicited.

Claims 1-8 were rejected as obvious over KRANZLE 4,989,786.

Applicant respectfully disagrees.

The Official Action considers it obvious to someone with ordinary skill in the art to modify the internal diameter, seat and smallest diameter to provide for dimensions that permit the use of a rotating jet nozzle with medium pressure supply using the teaching of KRANZLE. The prior art disagrees with this conclusion.

First of all, it should be noticed that all prior art documents refer to high pressure cleaners only, and that none of them even mention the possibility of realizing a cleaning device using medium pressure. The only considered possibility (SCHULZE) to vary the high pressure at the outset of the nozzle is by establishing a bypass of the fluid around the nozzle. But the pressure to be provided by the pump remains a high one. It seems as if all inventors had considered that it is <u>not possible</u> to

have a workable rotating nozzle unless it is activated by a high pressure.

It should also be noticed that for now twenty-five years such turbo nozzles exist and that so far none of the manufacturers has proposed such nozzle working with low or medium pressure, despite the fact that high pressure has many undesired side effects such as:

- possible deterioration of the washed surfaces;

- hazard for human health due to the very strong impact of the water jet; and

- a higher cost linked to high pressure pumps.

Looking at the equipment proposed by leading brands (see Annex 1 which is issued from a Google search on "rotating turbo nozzle and operating pressure"), no manufacturer proposes a power cleaner equipped with a turbo nozzle that works under pressure below 1300 psi (i.e. 90 bars). Most of them propose such nozzles with operating pressure between 1500 and 3000 psi (i.e. 100 to 200 bars).

In addition, Annex 2 shows that the operating pressure for a turbo nozzle sold by the Karcher Company has to be between 100 and 200 bars.

One should recognize that there are cleaning devices which can be operated at a pressure lower than 90 or 100 bars but these cleaners operate with standard non-turbo nozzles.

Consequently, someone with ordinary skill in the art would therefore think that medium pressure is not adapted for a turbo nozzle and that with a too low pressure a turbo nozzle would not work efficiently. He would thus stay away from medium pressure.

On the contrary, the present inventor has made a lot of work to adapt existing turbo nozzles so that they can be used for efficient cleaning at medium pressure, thus avoiding the disadvantages mentioned earlier for high pressure.

He came to the conclusion that turbo nozzles could in fact be used with medium pressure (namely, between 20 and 60 bars) provided the dimensions of the internal diameter, the seat and the smallest diameter of the seat are as indicated in the patent application.

It is therefore not obvious to someone with ordinary skill in the art to use such turbo nozzles with a medium pressure supply and consequently the claims are non-obvious.

Accordingly, reconsideration and allowance of all the claims are respectfully requested.

Should there be any matters that need to be resolved in the present application, the Examiner is respectfully requested to contact the undersigned at the telephone number listed below.

The Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any

overpayment to Deposit Account No. 25-0120 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17.

Respectfully submitted,

YOUNG & THOMPSON

Roland E. Long, Jr. Reg. No. 41,949
745 South 23rd Street
Arlington, VA 22202
Telephone (703) 521-2297
Telefax (703) 685-0573
(703) 979-4709

REL/lk

APPENDIX:

The Appendix includes the following items:

- Replacement Sheet for Figure 1

- Annex 1: Search results for "Rotating Turbo Nozzle and Operating Pressure"

- Annex 2: Illustration of Operating Pressure for Karcher Turbo Nozzle.